

WHAT IS CLAIMED IS:

1. A navi-server which is provided with information from a traffic information providing center, and presents and provides information made on the information to a terminal, the navi-server comprising:

5 a first storage means storing the information provided from said traffic information providing center;

a traffic jam statistical making means which makes traffic jam statistical information including traffic jam information in a predetermined point and a predetermined zone as well as a reliability of the traffic jam information, based on information stored in the first storage means; and

10 a second storage means storing information made by the traffic jam statistical making means,

wherein the navi-server presents and provides the information stored in the second storage means to said terminal, based on a request of said terminal and at a predetermined timing.

15 2. A navi-server according to claim 1, wherein said terminal is an in-vehicle navigation apparatus, said predetermined point is a predetermined intersection, said predetermined zone is a predetermined road zone, and said traffic jam information is information inclusive of at least one of a traffic jam occurrence frequency and average traffic jam degree.

20 3. A navi-server according to claim 1, wherein said traffic jam statistical making means makes said traffic jam statistical information with respect to each segment of a weather and road surface situation, based on information relating to past traffic information stored in said first storage means and the weather and the road surface situation from a meteorological information providing center.

4. A navi-server according to claim 1 which detects an abnormal value based on stored past traffic information and makes traffic jam statistical information including traffic jam information which is information including at least one of a traffic jam occurrence frequency and average traffic jam degree in a road zone of a predetermined point such as an intersection and between intersections as well as a reliability of the traffic jam information after removing the abnormal value if any.

5. A navi-server wherein as a detecting means of an abnormal value in the traffic jam statistical information making means of claim 4, a first detecting means judges and detects whole data of a predetermined period to be abnormal when a greater part of the predetermined period shows a traffic jam, and a second detecting means judges and detects data with a large deviation to be abnormal by comparing traffic jam information of a same time zone for a plurality of days

6. In a navigation system configured of a navi-server providing information with a navigation apparatus by controlling a road map and traffic information, and the navigation apparatus outputting the traffic information by sending data to and receiving data from the navi-server, the navi-server comprising:

a traffic jam forecast information making means making traffic jam forecast information composed of traffic jam forecast information for a future traffic jam trend of each traffic jam and a reliability of the traffic jam forecast information, from stored traffic jam information and real-time traffic jam information.

7. A display method of a car navigation which displays a position and proceeding direction of a user's car on a road map and displays a guide route

as needed, which the display method displays traffic jam statistical information including traffic jam information and a reliability of the traffic jam information overlapped on said road map.

8. A display method of a car navigation according to claim 7, the method comprising the steps of:

displaying additionally a circle at a traffic jam point depending on said traffic jam information; and

separating an inside of the circle into sectors depending on an occurrence time zone for the circle, and classifying colors of the sectors depending on one of a traffic jam occurrence frequency and average traffic jam degree.

9. A display method of a car navigation which displays a position and proceeding direction of a user's car on a road map and displays a guide route as needed, which the display method additionally displays a graphic representing traffic jam forecast information in said guide route.

10. A display method of a car navigation according to claim 9 which changes and displays a kind of line of a frame of an additionally displayed graphic depending on a reliability.